SUPPLEMENT TO THE AMERICAN JOURNAL OF ARCHAEOLOGY

A PRELIMINARY REPORT ON THE EXCAVATIONS AT CARTHAGE 1925

PACIFIC SCHOOL

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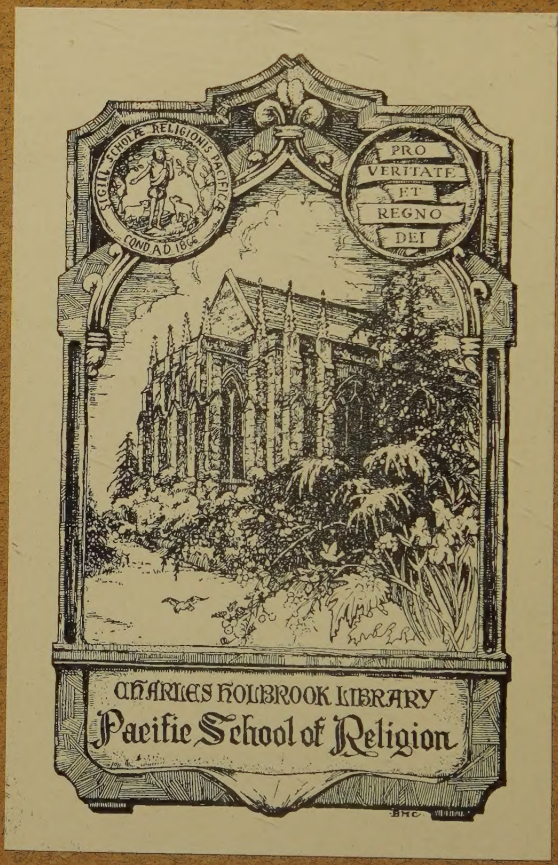
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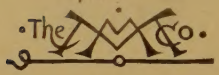

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PLATE I. CARTHAGE: VIEW SOUTHEASTWARD FROM THE BYRSA, OVER THE HARBORS AND THE INNER PART OF THE GULF OF TUNIS.

EXCAVATIONS AT CARTHAGE

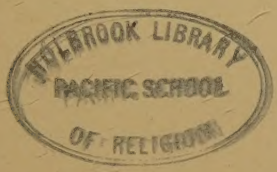
1925

A PRELIMINARY REPORT

BY

FRANCIS W. KELSEY

Correspondant de l'Institut de France
Mitglied des Deutschen Archäologischen Institutes



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TO

MR. AND MRS. HORACE H. RACKHAM

WITH

SINCERE APPRECIATION

PREFACE

To Byron Khun de Prorok belongs the credit of having inspired in a group of Americans an interest in the problem of excavating ancient Carthage. By lectures, conferences and publications he urged the importance of salvaging something of value from the ancient site before it is completely overspread with new buildings, and he sought assistance on the scientific as well as the pecuniary side in carrying on the work.

In this brochure the more important results of the work of the Franco-American Staff at Carthage in 1925 are briefly set forth, in response to a demand for early information. The suggestions in regard to the proposal to undertake a comprehensive exploration of the site of Carthage were submitted to the Washington Archaeological Society in November, 1925, and were presented at the meeting of the Archaeological Institute of America in December. Since the finds of outstanding importance are from the Punic stratum, in the precinct of Tanit, the full authoritative publication of them will be made by a Semitic scholar, Abbé J.-B. Chabot. Meanwhile, in conformity with the design of a brief preliminary report, it has seemed best not to attempt any correlation of these finds with those previously made in other Punic areas in North Africa and Sardinia, or with those which Joseph I. S. Whitaker has published in his *Motya: A Phoenician Colony in Sicily.*

The photographs for the illustrations were furnished by George R. Swain, photographer to the Near East Research of the University of Michigan. The plan of the excavation

in the precinct of Tanit was drawn by George F. French; it is based upon the survey made by him. The maps were drafted by W. E. Renner. Thanks are due also to Arthur Stanley Riggs, editor of *Art and Archaeology*, for permission to use part of the text and several illustrations of an article published in the February number of that magazine.

FRANCIS W. KELSEY

UNIVERSITY OF MICHIGAN
February 15, 1926.

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EXCAVATIONS AT CARTHAGE

I. HISTORICAL BACKGROUND

The archaeological stratification on the site of Carthage reflects four periods. Though in matters of this kind dates are inexact and only approximate, the four periods may be conveniently defined as the Punic, to 146 B.C.; the Roman, 146 B.C. to 439 A.D.; the Vandal, 439 to 533 A.D., and the Byzantine, 533 to 698 A.D. It will perhaps make our discussion of the problem of excavating at Carthage easier to follow if we briefly recall a few facts relating to the development of the city in the first two periods, and its destruction.

"From a financial point of view," says the historian Mommsen, "Carthage held in every respect the first place among the states of antiquity. At the time of the Peloponnesian war this Phoenician city was, according to the testimony of the first of Greek historians, financially superior to all the Greek states, and its revenues were compared to those of the Great King," the king of Persia. "Polybius calls it the wealthiest city in the world."

The reasons for the rise of Carthage to wealth and power are not far to seek. While the city was probably founded in the latter part of the ninth century before Christ, the name in the Phoenician language means "New-town." Whether the "Old-town" implied by such a characterization was the still older Phoenician colony Utica — only a few leagues away, near the mouth of the river Bagradas — or the parent-city Tyre, it does not concern us to know;

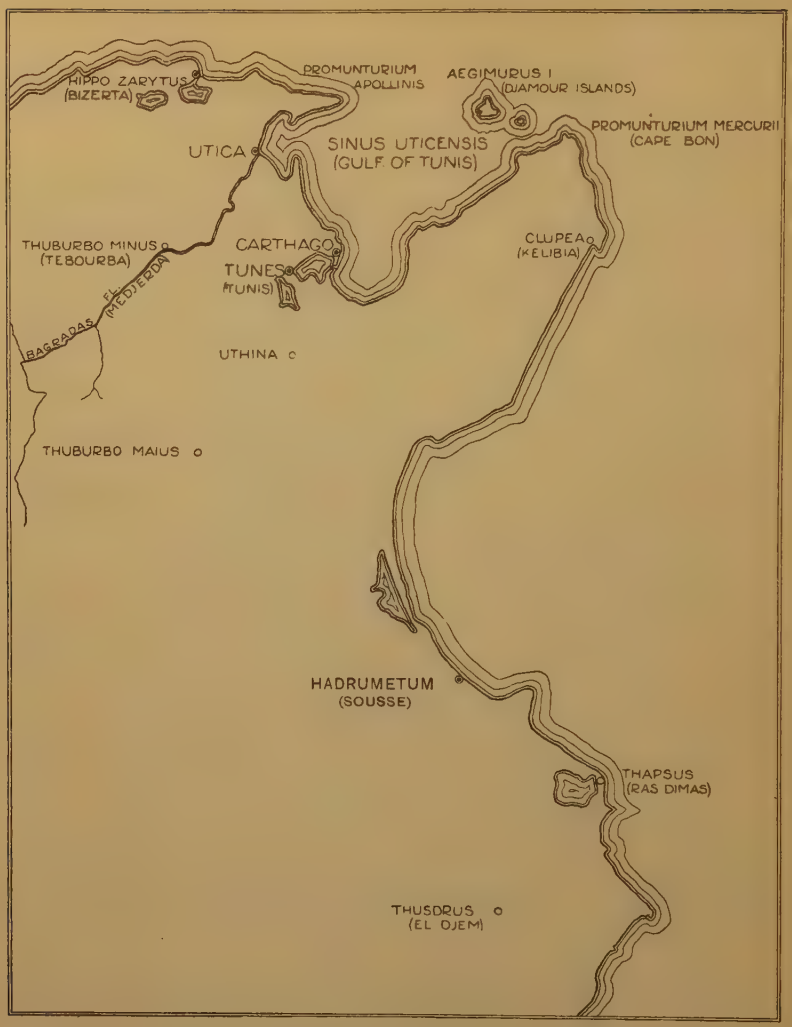

FIG. 1. — MAP OF THE REGION OF CARTHAGE.
This map shows the location of Carthage in relation to the other Phoenician colonies of Utica and Hadrumetum.

for from Tyre the colonists brought the tradition and practice of acquiring gain by commerce. The words of the prophet Ezekiel addressed to Tyre as "the merchant of the peoples unto many isles" would later have been equally

PLATE II. Utica: View over a Part of the Site and the Marsh filling the Ancient Harbors.
In the foreground is an excavation, in which are seen two stone sarcophagi, monolithic.

applicable to Carthage, which by reason of certain advantages rapidly outstripped all the other Phoenician colonies about the Western Mediterranean, and even cast into the shade the prosperity of the older cities of the Syrian coast.

These advantages were in part economic and in part political. From Cape Bon, the Roman Promontory of Mercury, the coast-line follows a southerly trend to the borders of Tripoli. But west of Cape Bon there is a deep southerly indentation, which is now called the Gulf of Tunis. In this angle of Africa there are mountains, marshes and some stretches of desert, yet there is much fertile soil; and a glance at the map (Fig. 1) is sufficient to indicate to the student of trade-routes the inevitableness of the development of a dominant center of trade in the region, serving not only the country round about but also more distant productive tracts and oases reached by caravan.

Utica might have gained the ascendency had not the treacherous Bagradas, now the Medjerda, gradually silted up her harbors (Plate II); today the site is chiefly grazing land — part of a great French estate prospering under scientific management — though remnants of ancient masonry here and there still project above the uneven contours of the ground. Hadrumetum, also a Phoenician colony and a rival of Carthage, was more fortunate than Utica in retaining its harbors; yet in other respects it was less favorably situated, and after a time became subject to Carthage. On this site there has always been a town, and to French building operations here we owe the discovery, in 1896, of the only authentic portrait of the poet Virgil.[1]

Primarily commercial, and not military, in purposes and institutions, Carthage was for several centuries politically

[1] The mosaic containing the portrait has been frequently reproduced, but is best published by P. Gauckler in the *Monuments et Mémoires* of the Académie des Inscriptions et Belles-Lettres, *Fondation Piot*, vol. IV (1897), pp. 233–244 and plate XX (in colors).

fortunate. Her organization as a city-state was sufficiently stable to safeguard against the instability of crass tyrannies. The native populations of this part of Africa were incapable

FIG. 2.—LOWEST OF THE THREE LEVELS OF THE PUNIC STRATUM.

Bed rock, of limestone, exposed by excavation in the precinct of Tanit.

Here cinerary urns were deposited, resting on the rock and protected by small cairns of stones. One of these cairns is seen in a fissure of the rock near the lower edge of the illustration, at the left of the middle.

The terrace at the right represents the stele surface (p. 34).

In the middle ground are shrine-stones (p. 40), immured in the concrete wall of the Roman vault (p. 34).

of developing coherent military resistance strong enough to force the Phoenician intruders, who withal were shrewd in dealing with less advanced races,[1] back upon the sea; and

[1] The shrewdness of the Carthaginians in their dealings with the natives may have given rise to the tale about the purchase of ground that could be covered by a bull's hide, with the extension of the area by cutting the hide up into the thinnest possible strips, which were laid end to end to form a boundary. The story may, however, be merely an aetiological myth, suggested by the resemblance of the name for the citadel of Carthage to the Greek word for "hide." But whatever the truth may be regarding the origin of the story, it has traveled far. The same trick is said to have been played by American whites upon the Delaware Indians and by the Dutch upon the natives of Formosa, while the Chinese annals of the Ming period assert that the Spaniards availed themselves of the same ruse in bargaining with

Carthage was far enough west to be unjeopardized by the aggressions of Egyptian or Assyrian or Persian kings. By virtue of colonization and trade she became the administrative center of an empire, having under her control extensive possessions in Africa, Spain, Sardinia and Sicily; upon the Western Mediterranean she was supreme, and we are told that if trading ships of other peoples came within her maritime domain, their crews were promptly thrown overboard. The population of Carthage is said to have reached seven hundred thousand, but how large an area is included in the estimate it is not now possible to know.

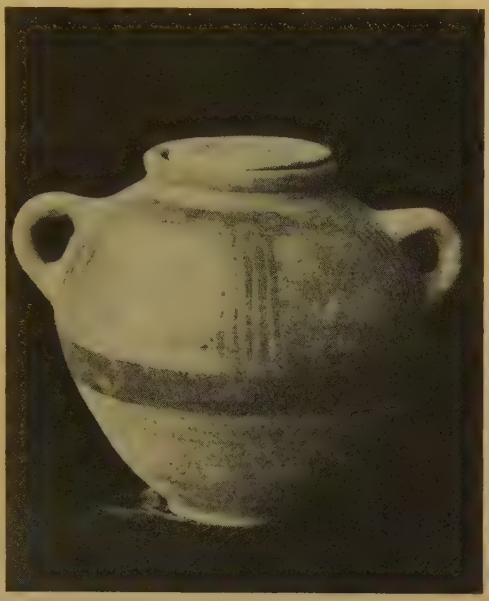

FIG. 3. — CINERARY URN, FROM LOWEST PUNIC LEVEL. This was found on the bed rock shown in Figure 2. It was protected by a cairn of small stones (p. 43).

The extension of the dominion of Carthage was first checked by contacts with the advancing outposts of Greek civilization in North Africa (from Cyrene westward), and in Sicily; and in that island came the contacts with the Romans which led to the final agonizing struggle for supremacy

the King of Luzon, thus obtaining possession of the ground on which Manila stands.

The story is localized also in various parts of Asia, where the tricksters are in some cases said to be Russians, in others, representatives of different nations. The details and literature are given by B. Laufer, *Smithsonian Miscellaneous Collections*, vol. L (1908), pp. 258–259, 282–284.

of the Mediterranean world. On the north side of the Mediterranean there was developing a Graeco-Roman culture, wherein our Occidental civilization had its origin; on the south side a Semitic culture, unchangeably Oriental, had reached its period of bloom. The Punic wars started in 264 B.C.; not till 146 B.C. did they come to an end, in what has been generally considered the "complete destruction" of Carthage. "The wars between Rome and Carthage," Professor Haight remarks, "are but one chapter in a larger struggle, the ever-recurring contest between the West and the East."

The inevitableness of city-founding left the site not long unoccupied. A new Carthage arose, which became a Roman provincial capital, and which in time became second only to Rome herself in wealth and influence. The size and prosperity of the new Carthage may be gauged by the fact that in the second century of our era an aqueduct was built which is said to have brought to the city more than seven million gallons of water per day. Carthage became a Christian city, with which were associated the names of eminent early churchmen, as Tertullian and Cyprian; and famous Councils of the Church were held there. It is of record that there were twenty-two Christian basilicas in the new Carthage, and its population was estimated at half a million.

The decline of the later Carthage began with the arrival of Genseric, in 439 A.D.; he gave the city over to plunder, and made it a Vandal base. Nearly a hundred years afterward, in 533 A.D., the successful Belisarius entered Carthage with an army, and under Byzantine rule the city again regained a measure of its former prosperity and power.

In the latter part of the seventh century the Arab conquests spread to the region of Carthage. In 698 A.D. the Arab conqueror decreed the "entire destruction" of the city,

and we are told that his orders were ruthlessly carried out. Carthage all but disappears from historic records for half a millennium, to be mentioned again by reason of the landing and death of the French king, Louis IX, in 1270 A.D. Afterward become Saint Louis, this Crusader is gloriously commemorated in the imposing cathedral which now crowns the height of Byrsa (Plates III, IV).

FIG. 4. — CINERARY URN FROM THE INTERMEDIATE LEVEL OF THE PUNIC STRATUM. It is of a buff color. The height is m. .213.

In material remains the successive epochs of the history of Carthage are most fully represented by minor objects of terra cotta, often broken into sherds, and of metal. In the tombs and graves, vases and ornaments of many types are found; and in 1925 a noteworthy series of cinerary urns was taken from the precinct of Tanit (p. 43). These urns were all of the Punic period, ranging in date probably from the

ninth to the second century B.C., and Punic lamps also were found; but in the upper strata of the same excavation lamps of later periods were unearthed, Roman, Christian (Fig. 5) and Vandal. Bronze coins found in the earth at Carthage are generally badly corroded.

FIG. 5. — CHRISTIAN LAMP, OF TERRA COTTA.

This lamp was found in the precinct of Tanit, near the surface. The nozzle, with the large hole for the wick, is slightly broken, as is also the handle at the opposite end. The monogram is made up of the first two letters of the Greek name for Christ. This is ornamented, and there is ornamentation on the border on either side.

Egyptian influence is manifest in objects belonging to the earliest Punic period, such as scarabs and amulets; later there is abundant evidence of the importation of Greek wares, down to 146 B.C. Many handles of amphorae with Greek stamps attest extensive importations from Rhodes; Punic graffiti fix the period as pre-Roman. The first surface find which I made at Carthage, when I studied the site in 1893, on the then open ground between the Byrsa and the sea, was a broken handle of an amphora with a Greek stamp.

PLATE III. Carthage: View over the Site toward the Southwest.

II. ORGANIZATION AND STAFF

The work of the Franco-American Staff in 1925 was carried on under the charter of the Washington Archaeological Society, of which the Honorable Robert Lansing is president.

The Washington Society has a Research Committee, of which the chairman is President John C. Merriam, of the Carnegie Institution. This Committee had taken the initiative in arranging for an important investigation in the prehistoric field; and in January, 1924, the writer of this report was invited to meet with it in order to consider the problem of conducting excavations on the site of Carthage, in accordance with a proposal of Count Byron Khun de Prorok. Since the systematic excavation of Carthage would necessarily extend over a number of years and would involve the expenditure of large sums of money, Mr. Kelsey recommended that it should be undertaken only after a preliminary campaign should have revealed favorable working conditions and should have demonstrated that the site would yield a sufficient contribution to knowledge to justify the investment. His view was accepted by the Committee, and later he was invited to assume the responsibility of conducting a preliminary campaign along the line suggested.

In arranging to defray the costs of the campaign the Washington Society received generous support from the Near East Research Fund of the University of Michigan, and from special contributions made by the University of Rochester and by Mr. William F. Kenny, of New York. Very fortunately it was possible to engage as engineer in

charge of the excavating Mr. Edward R. Stoever, a graduate of Princeton University, who had worked for five seasons with Professor Howard Crosby Butler in the excavations at Sardis. Through the good offices of Count de Prorok the attention of the foremost French scholars in the North-African field was directed to the undertaking, and four of them were invited to become members of the staff and accepted the invitation. In view of the magnitude and complexity of the problem, and the necessity of working intensively in the three months most favorable for excavation at Carthage — March, April and May — a larger force of trained men was required than is ordinarily needed for such an undertaking.[1] The members of the Staff, as it was finally constituted, early in 1925, are as follows:

The Rev. Père A. Delattre, Honorary Chairman; Francis W. Kelsey, General Director; Count Byron Khun de Prorok, Associate General Director; Edward R. Stoever, Engineer; the Abbé J.-B. Chabot (Editor of the *Corpus Inscriptionum Semiticarum* for the Académie des Inscriptions et Belles-Lettres,[2] now president of the Académie), Punic Antiquities; Professor Stéphane Gsell (of the Collège de France[3]), Historical Questions; Alfred Merlin (of the Louvre[4]), Greek and Roman Antiquities; Dr. Henry S. Washington (of the Carnegie Institution), Petrographer;

[1] In forming the preliminary organization for this campaign the Secretary of the Washington Archaeological Society, Professor Mitchell Carroll, rendered invaluable assistance. His untimely death, in March, 1925, was a grievous loss not only to this but to many other cultural interests.

[2] The Abbé Chabot is also editor (with Messrs. I. Guidi, H. Hyvernat, and J. Forget as colleagues) of the *Corpus Scriptorum Christianorum Orientalium.*

[3] The second edition of vol. IV of his monumental *Histoire ancienne de l'Afrique du Nord* was published in 1924.

[4] Not least among M. Merlin's contributions to North-African archaeology was the salvaging of works of art from the galley lying off Mahdia, on the coast of Tunisia, at a depth of 120 feet; cf. *Comptes rendus de l'Acad. des Inscriptions et Belles-Lettres*, 1908, pp. 245 ff., 386 ff., 532 ff.; 1909, p. 650 ff.; 1910, p. 585 ff.; 1911, pp. 206 ff., 556 ff.; *Monuments et Mémoires, Fondation Piot*, volumes XVII and XVIII (Bronzes).

Professor Enoch E. Peterson (of Luther College, Iowa; Research Fellow of the University of Michigan), Recorder of Finds;[1] Frederick J. Woodbridge (a graduate of Columbia University in Architecture, Boyer Fellow of the University

FIG. 6. — A GLIMPSE OF ANCIENT CARTHAGE.

The appearance of this assemblage of Dedicatory Stones is much the same as it was near the end of the Middle Punic period, perhaps about 400 B.C., except that some stones now with rough surface were then covered with white stucco, and probably bore inscriptions and symbols painted on the stucco.

of Michigan), Architect, with two assistants, Ralph M. Calder (Booth Fellow of the University of Michigan in Architecture) and William Douglas (Fellow of the American Academy in Rome); George R. Swain (of the University of Michigan), Photographer,[2] with an assistant, Robert R.

[1] The journal of the excavations prepared by Mr. Peterson makes a type-written volume of 450 pages. The inventory of the finds recorded by him with descriptions and measurements contains two thousand entries.

[2] The negatives made by Mr. Swain in North Africa March 11–May 14, 1925, number 818, classified as follows: Panoramic Views (size, approximately 10 × 35 inches), 32; Detail Views (size, 7 × 11 in.), 290; Small Views (size, 5 × 7 in.), 246; Objects and Details (size, 3.25 × 4.25 in.), 250.

Swain, who served also as expert in the repair of the motor vehicles; and Donald B. Harden (Instructor in Aberdeen University, absent on leave by courtesy of Professor Souter), Ceramics.

The Rev. Père Delattre resides at Carthage, and from the time when the other members of the Staff began to reach the site, at the end of February, 1925, he did everything in his power to facilitate their work.[1] The Abbé Chabot arrived from Paris on March 6, and spent all working days in the excavations till the close of the season. Professor Gsell and Mr. Merlin were detained in Paris, but offered to come to Carthage in case their services should be urgently needed.

In addition to the members of the regular Staff there were volunteers who at different times took an active part in the work, rendering service as inspectors in charge of the Arab workmen and in other ways as the need might arise. Among them were Dr. Orma F. Butler and Miss Nita L. Butler, Research Fellows of the University of Michigan; George F. French, a graduate of the Massachusetts Institute of Technology, who rendered a noteworthy service near the end of the season by completing the work of surveying after Mr. Stoever was obliged to return to Paris; William E. Hayes, a graduate of Princeton University, Horton O'Neil of New York, Gerard Rey de Villette of Paris and Columbus C. Wells of Chattanooga, Tennessee. To these as well as the others whose cordial coöperation contributed to the success of the campaign the thanks of all interested in the problem of Carthage are due. Count de Prorok placed at the service of the Staff as headquarters the attractive Villa d'Amilcar at Sidi-Bou-Saïd, and the University of Michigan contributed the use of the Dodge

[1] In 1925 the list of Père Delattre's publications relating to the archaeology and history of Carthage numbered 220 titles.

Sedan car and Graham Brothers truck which had been presented to the University for service in the Near East.[1] The work closed on May 14.

In a brief preliminary report it is difficult even to summarize the results of this intensive campaign, which lasted only two and a half months but touched large issues and raised weighty questions. I shall limit myself to three topics: the advisability of undertaking a systematic unearthing of Carthage, the excavation on the so-called hill of Juno, and the finds in the area consecrated to the goddess Tanit.

[1] The car and truck were used not only at Carthage but also for transporting photographic equipment and supplies on an archaeological reconnaissance in Tunisia and Algeria, April 7–29.

In this period they were driven without delay or accident 1975 miles. The sites and places visited were: Sousse, El Djem, Sfax, Gabès, Medenine, the island of Djerba (reached by an improvised ferry); return to Gabès, and excursion into the Matmata region; then via Kebili to Tozeur.

From Tozeur the route to Sbeitla was followed by way of Metlaoui, Gafsa, Feriana, and Kasserine; back to Feriana, over the divide to Tébessa, with a side-trip to Haïdra; then by way of Aïn Beïda, Khenchela and Batna to Biskra, with an excursion to Timgad; return to Aïn Beïda; thence by Sedrata, Khamissa, Souk Ahras, Souk El Arba, Medjez El Bab and Tunis to Carthage.

III. THE EXCAVATION OF CARTHAGE

It is not necessary here to refer to the previous excavations on the site of Carthage. Those prior to 1900 are summarized and evaluated by Auguste Audollent,[1] and those conducted since that date are recorded in publications that are easily accessible. It will suffice to say that thus far the excavations have followed no comprehensive plan, and that from a scientific point of view they have been far from adequate. While excavation and accidental discovery have brought to light thousands of objects of interest reflecting the cultures of the Punic, the Roman and the later periods, there are still great gaps in our knowledge; in particular, there is a singular lack of decisive evidence regarding the topography of the city in the different epochs, the stages of its development and the relations of its harbors to the sea. Is there a reasonable prospect that these gaps will be in part at least bridged by a thorough exploration of the site?

In the Roman and Byzantine periods, at any rate, Carthage was seemingly not large when measured by the scale of modern cities (Fig. 7). In the latest guidebook[2] there are listed more than fifty monuments which it is considered worth while for the visitor to see; and these are located in a circumscribed area, which extends from the village of Le Kram, on the seashore, north to Bir Ftouha, a distance not more than 3000 meters (about two miles), while the area at no point reaches back more than 2000 meters from

[1] *Carthage Romaine, 146 avant Jésus-Christ–698 après Jésus-Christ* (Paris, 1901), pp. 3–26.

[2] *How to See Carthage.* By J. and L. E. Douglas. Translated from *Pour visiter Carthage,* by Docteur L. Carton. Tunis, 1925.

PLATE IV. Carthage. View toward the Northwest, across the Commercial Harbor to the Byrsa

the irregular shoreline. In the list of monuments are a few of Punic origin; how far either the Punic or the later city spread beyond this area has not yet been accurately deter-

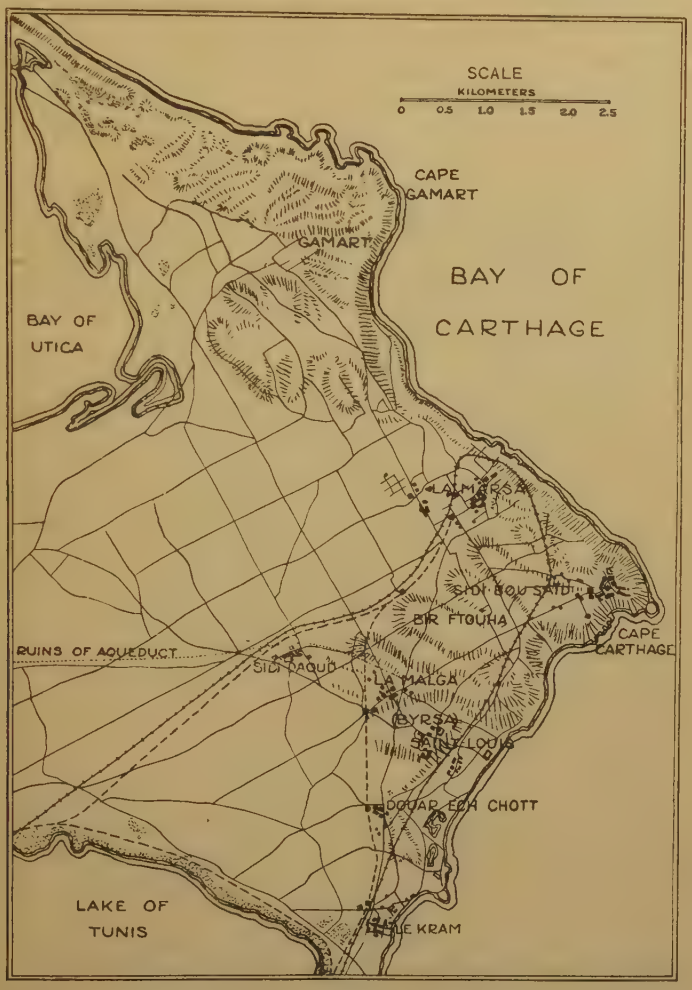

FIG. 7. — THE PENINSULA OF CARTHAGE.

The map illustrates the limitations of the site of Carthage. The point of the peninsula on the northwest extending into the Bay of Utica is not shown, nor the southernmost point reaching to La Goulette.

The broken line shows the course of the old railroad, which ran from Tunis to La Marsa and from La Marsa west of the Byrsa to La Goulette.

mined. Nevertheless two points are clear. The height of Gamart, on the north, was given over to cemeteries; and the extension of the city on the south and west was limited by the low ground and bodies of water on either side of the neck of land which afforded communication with the region of Tunis and the interior (Plate III). Very few of the monuments, except tombs, have been completely cleared and studied.

The opinion has largely prevailed that the destruction of Punic Carthage by the Romans in 146 B.C. was complete. We are told that the city was plundered, and that it burned for seventeen days.[1] Says Mommsen:[2]

"The senate ordered the general to level the city of Carthage and the suburb of Magalia with the ground, and to do the same with all the townships which had held by Carthage to the last; and thereafter to pass the plough over the site of Carthage so as to put an end in legal form to the existence of the city, and to curse the soil and site for ever, that neither house nor cornfield might ever reappear on the spot. The command was punctually obeyed."

Other modern writers are equally explicit.

It is not unlikely that in antiquity forests on the mountains nearest to Carthage furnished an abundant supply of timber for construction; also, that in the poorer quarters of the city the use of friable sun-dried brick for walls was general. Yet an inspection of the Punic tombs on the Byrsa, or in the new excavations at Utica, or a glance at the stelae and other stone monuments unearthed in the precinct of Tanit, will suggest the conclusion that the Carthaginians, like the Phoenicians, were expert in the use of tools and mechanical appliances; they were skilful both as workers in

[1] The ancient sources are cited and dealt with by S. Gsell, *Histoire ancienne de l'Afrique du Nord*, vol. III², p. 336 ff.

[2] *History of Rome* (new edition of the translation, 1895), vol. III, p. 257.

metal, as potters and as masons. It is consistent with our knowledge of Carthage from literary sources to suppose that stone had an important place in the more permanent buildings of the city; and different qualities of stone, some of them coarse-grained and easily worked, were found not far away.

My view of the completeness of the destruction of Carthage, once based wholly on literary evidence, has in recent years undergone modification. In 1919, a few months after the close of the Great War, under military guidance with Mr. Swain the photographer I visited the ruins of a number of towns in the zone of destruction, from Louvain in Belgium almost to the frontier of Switzerland; and since then an opportunity has been presented to study the archaeological stratification of various ancient sites where several towns in succession were built one above the ruins of the other. The subject is too large to be discussed here; yet in the light of the facts we are warranted in believing that, lacking all explosives, neither the soldiers of the victorious Scipio nor the Arab hordes could have accomplished such destruction as was caused in the Great War by bombs and shell-fire.

There was, of course, devastation by burning, as the literary sources indicate. A grim reminder of the Roman destruction in 146 B.C., probably, is the layer of charcoal and other material showing the effects of fire, in our illustration (Fig. 8); this layer in places is twenty centimeters thick. But a post-war study of the effects of fire and of shell-fire on masonry, not only in Reims but in smaller cities in the zone of more complete destruction in France and Belgium, aroused in my mind scepticism in regard to the completeness of the destruction of the more permanent buildings of both the earlier Punic and the later Roman Carthage.

When the Roman colonists came to the site of the Punic city, twenty-four years or more after the first destruction of Carthage, they probably found great stretches of jumbled masonry, from three to ten or fifteen feet deep, with flame-scarred walls here and there projecting upwards. The familiar tales about Marius in exile may be in part apocryphal; but even so it is difficult to understand how the story about Marius "sitting among the ruins of Carthage"[1] could have originated if there were no ruins there. Furthermore, it is probable that the builders of the later city, whenever their building operations extended over the area of the ruins, took no pains to clear the earlier streets but laid out their street system above the debris to suit their own convenience and ideas. It would have been equally a waste of labor to clear out cellars or depressions filled with debris

FIG. 8. — EVIDENCES OF BURNING, PRECINCT OF TANIT.

Part of a narrow vertical section of earth on the northeast side of the Stele Area, near the Roman vault. The layer of charcoal and other burnt material is easily distinguished. It is just above the third, or upper, level of the Punic stratum.

Above is the end of a grave, apparently of the Vandal period, about a meter and a half below the surface of the ground. In this bones were found. The sides of the grave were made of flat stones, and the projecting end of the stone cover is seen.

[1] ἐν τοῖς Καρχηδόνος ἐρειπίοις καθεζόμενον are the words of Plutarch, *Marius* xl.

unless there was reason to suspect the presence of objects of value.

For the later city, this scepticism in regard to completeness of destruction is justified by the known monuments, some of which, as the ruins of certain public baths, must always have been visible, while others, as the remains of the theater and the great basilicas, were covered for centuries by accumulations of debris and earth and have been disclosed by excavation. We may once for all assert that the principal agent in the destruction of later Carthage has been the seeker of building-stones. His work still continues, though now he must excavate by digging pits; but for centuries Carthage was an open quarry, from which materials of construction were extracted not only for the building of Tunis — the commercial and political successor of Carthage — but for other cities; it was a seemingly inexhaustible store of rare and precious marbles and porphyries and granites as well as of commoner stones.

Today in a brief walk along the shore one may pick from the sand wave-rounded pebbles not merely of giallo antico (the ancient marmor Numidicum) from the quarries near the Bagradas, but of Greek marbles as well, and other varieties of stone from remote regions. The shape of these pebbles shows that in most cases they are remnants of thin slabs which were used for the veneering of walls in the Roman period. In one spot in the precinct of Tanit the ground at a certain depth was found to be full of small fragments of a Roman mosaic pavement, which had been completely destroyed, probably in digging out stones for building. Pebbleized bits of marble are, to be sure, found elsewhere, as along the shore at Porto d'Anzio (ancient Antium), where fragments of veneering and pavements have dropped down as the sea has undercut the supporting masonry of the great villa there; but outside of Rome itself I know of no

site where surface finds yield so great an abundance of small pieces of marble as that of Carthage. And these fragments generally show no traces of heat, which easily calcines most kinds of marble, so that they could not have been affected by a general conflagration.

To what extent it is still possible to obtain a knowledge of either Punic or later Carthage by digging, can only be ascertained through an extended and skilfully conducted series of trial excavations, to supplement the meager data now available (Fig. 9). But in any case, though the recovery of works of art of a high order cannot be safely anticipated, such excavations are necessary if the world is not soon to lose all opportunity to recover what may yet be recovered of the data requisite to complete that important chapter of cultural history.

When the French established an orderly government in Tunisia, and in accordance with the French scientific tradition began to take account of such ruins as seemed to possess artistic or historical interest, the site of Carthage, with the land along the shore immediately north and south, was for the most part open country, with two or three Arab villages, which in part utilized the great ancient cisterns, or reservoirs, as habitations; only a few ruins obstructed the view as one looked in all directions from the height of Byrsa. As usually happens in the case of deserted or ruined cities, a thick layer of soil had accumulated above the debris caused by the crumbling of masonry, but loose stones and projecting walls had been the prey of builders.

Such, in general, was the aspect of the site as late as 1893, when I first made a study of it. The Cathedral and some other modern buildings were already conspicuous upon the Byrsa, but there were not even fences to prevent the pedestrian from walking over most of the site, and no objection was raised if he followed the paths among the growing crops

where the land was under tillage. At that time a short railroad ran from Tunis to La Marsa, north of Carthage, where the Bey has a palace; and a branch line passed west

FIG. 9. — VIEW IN THE PRECINCT OF TANIT.

In the foreground is the stele surface (p. 34), with dedicatory stones left standing just as they were found. Beyond is the small area where the dedicatory stones were removed and the excavation was carried down to bed rock (Fig. 2). The stones thus removed are shown at the left, against the ancient wall at the rear (p. 34).

At the right is the northwest end of the Roman vault (p. 34).

of the Byrsa to the port of La Goulette, on the south; there was no direct connection between Tunis and the part of the site which lies along the sea (Fig. 7). It would then have been no difficult matter to conduct trial excavations, if funds had been provided and the requisite permits could

have been secured; and Père Delattre was already obtaining noteworthy results in his work on the height of Byrsa.

At the present time such exploration involves difficulties that are far more serious than those ordinarily presented by sites not actually covered by modern cities, as are the sites of ancient Rome, Athens and Constantinople. For in recent decades Tunis has more than doubled its population and has so increased in riches that its European element craves the luxury of suburban residence. In summer the heat of Tunis, which is low and close to bodies of shallow water, becomes oppressive, while on the site of Carthage, ten miles away, fresh breezes blow in from the sea. In point of location and climate the site of Carthage is the most attractive spot in the entire region available for suburban residence, and the real-estate men have seized the opportunity. The most desirable part of the site has been made accessible by an electric railway which starts at Tunis and runs between the shore and the height of Byrsa; there are comfortable three-car trains twice or three times an hour in the daytime, and at the station of Carthage, which is at the foot of the Byrsa, as well as at other stations, once or twice a week in the season a placard advertises a theater train, "Train du Théâtre," for the late evening (Fig. 10).

The trains make the distance of ten miles between Tunis and the station of Carthage in about thirty minutes.

The most important part of the site has been divided into small lots (Fig. 11), of which a large number are already built on, and land is firmly held at prices ranging from the equivalent of forty cents to a dollar or more a square meter. The site of Carthage, once placed under a curse by its destroyers, is having a real-estate boom like that of an American or West-Canadian town. Nevertheless there is good prospect that the high values will continue to hold, at least for the immediate future. Most of the houses are

FIG. 10. — DEVELOPMENT OF THE SITE OF CARTHAGE AS A SUBURBAN RESIDENCE SECTION.

The map shows the route of the electric railway in relation to the shore, the Military and Commercial Harbors so-called, the precinct of Tanit, and the Byrsa. The stations, designated by number, are: 1, Le Kram; 2, Salammbo; 3, Douar-Chott; 4, Dermech; 5, Carthage; 6, Sainte-Monique; 7, Amilcar; 8, Sidi-Bou-Saïd.

A large-scale map would be required to show the new streets, the groups of new buildings, and the location of the ancient remains.

small and of one story; and since it is not necessary to lay deep foundations as a protection against the effects of freezing, the excavations for buildings ordinarily do not go down to the Roman level, much less the Punic, which

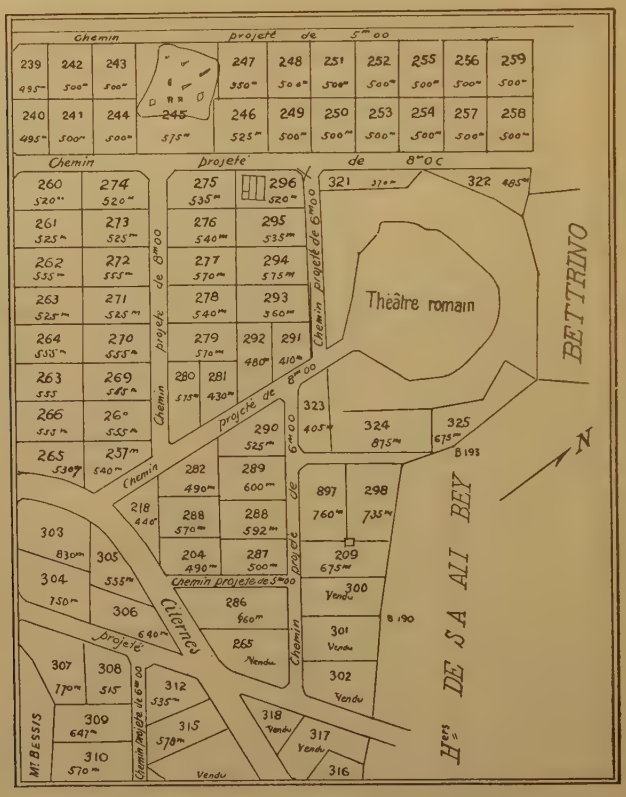

FIG. 11. — REALTOR'S SUBDIVISION OF THE SITE OF CARTHAGE.

This is a very important part of the site of Carthage, northeast of the Byrsa, near the Roman Theater. The real-estate holders have made a number of such maps.

lies at a varying depth of two to four meters; hence they contribute very little to our knowledge of the ancient city. Even the location of the Roman Forum has not yet been determined.

But further detail is needless. Notwithstanding the

destruction of ancient masonry projecting above the surface, we may assume that the foundations of important buildings of later Carthage, and much else of interest, lie hidden in the accumulated earth. Of the Punic period important tombs, excavated chiefly by Père Delattre, have yielded amazing finds, which are fruitful for the reconstruction of certain aspects of Carthaginian culture; these are made accessible for study in the well-arranged Museum of St. Louis. That much else of a different sort survives from the Punic past is implied by the finds in the precinct of Tanit (Fig. 12).

FIG. 12. — SHRINE-STONE FOUND IN THE PRECINCT OF TANIT.

Through a deep portal we see the symbols of Tanit: above, a crescent and a disk; below, a triangle with a bar across the apex, and a circle or disk resting on the bar.

The suggestions which present themselves after a study of the conditions may be succinctly formulated under five heads:

First. Before building operations are carried further, the site should be systematically explored by means of systematic trial excavations, supplemented by the complete unearthing of monuments or areas of sufficient promise. This task should be accomplished as a contribution to our knowledge of the ancient cultures that flourished there.

Second. In view of the extent of the site, and the high prices demanded for land, whether built on or without buildings, such exploratory excavation by a scientific organization operating with its own means, or with funds furnished by private contributions, is almost out of the question; the initial cost is practically prohibitive.

Third. The excavation and preservation of Carthage require that the whole site should be brought under control by building restrictions prohibiting the erection of new buildings within certain limits, and by the gradual purchase or expropriation of land. The site should then be excavated and developed as a great archaeological park, under an administration similar to that of Pompeii, Timgad and other sites properly excavated and opened to the public.

Fourth. From such a development of the site as a national archaeological park two results would follow:

a. The forestalling of any criticism which might attach to the French administration of Tunisia on the ground that it has failed to conform to French cultural tradition in permitting a unique site of this character to be grasped for commercial purposes without adequate previous scientific examination; and

b. A stimulation of income to Tunisia in the funds brought into the country by visitors, on account of the added attraction; the additional income ultimately would probably much more than repay all the costs.

Fifth. If the French Government should undertake to carry out such a plan as that proposed, and should offer proper encouragement, it is highly probable that scientific organizations would be pleased to coöperate by undertaking special excavations of limited scope, such, for example, as that which has been shown to be fruitful by the discoveries in the area consecrated to Tanit.

PLATE V. Carthage: An Excavation in Progress on the So-called Hill of Juno, 1925.

The massive vaults are of Roman construction and form part of a series which supported the foundation of a Roman villa. On similar vaults at the left — not shown in the illustration — mosaic floors are preserved.

IV. THE EXCAVATION ON THE HILL OF JUNO

With funds contributed by a member of the Washington Archaeological Society, Count de Prorok, in 1922, purchased for excavation a small area on the east slope of the so-called hill of Juno, which is itself an extension of the height of Byrsa toward the northeast. Here a portion of a Roman villa was excavated, and five mosaics were uncovered. In the spring of 1923 one of the mosaics, representing a boar-hunt, was taken up and transferred to the Bardo Museum.

The main structure of the villa was carried on huge vaults, two of which are shown in our illustration (Plate V). In another vault a small museum was installed for the storage of the numerous lamps and other minor objects found in the digging. The work was continued in the spring of 1924; and in the present year our staff completed the removal of certain accumulations of earth above and under the large vaults.

It has not yet been possible to prepare for publication the interesting finds of this villa. Though they are of considerable value, it is doubtful whether the continuation of this excavation by private support would be justified from a scientific point of view. The available area is not large enough to yield complete information regarding the villa, and it is not practicable to secure adjoining land to carry the excavation to a suitable conclusion. Provision also must soon be made for the protection of the mosaics left in situ, which are exposed to the weather and are beginning to show signs of disintegration, and for strengthening the vaults where these are beginning to give way.

Though private initiative and resources may bring important remains of antiquity to light, their permanent care and conservation becomes the responsibility of the governments under whose permits the excavations have been made. It will probably be best to arrange to turn this excavation over to the Tunisian Government without further expenditures for digging.

PLAN OF THE EXCAVATION IN THE PRECINCT OF TANIT

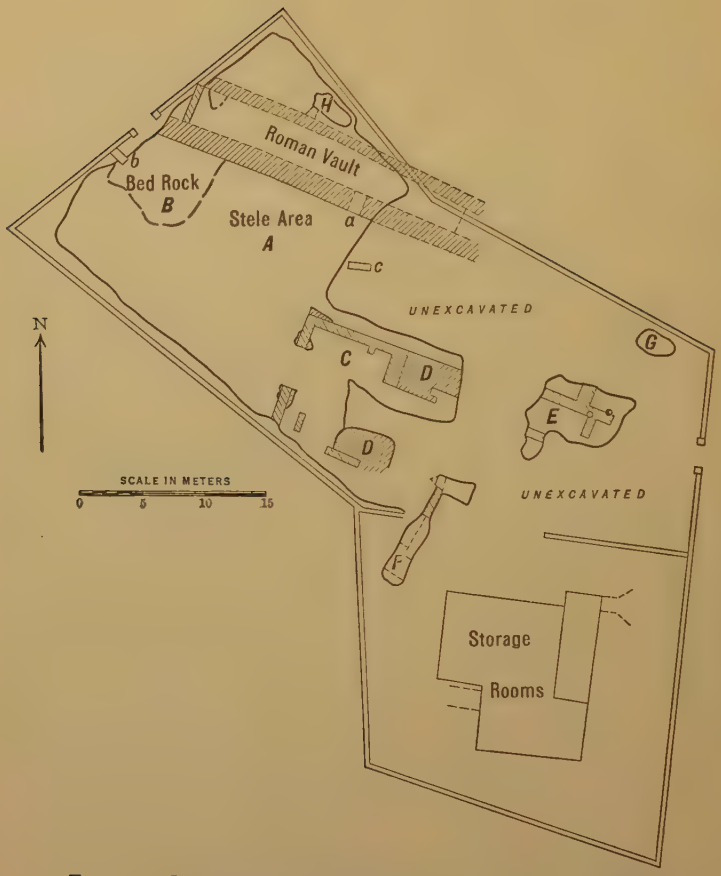

FIG. 13. — PLAN OF THE EXCAVATION IN THE PRECINCT OF TANIT.

KEY TO THE PLAN

The extension below at the right, with the outline of a building marked "Storage Rooms," is a separate lot, on which is a small villa. It was purchased in 1925 to furnish storage for the urns and other objects which were brought to light in the excavation.

The original lot, purchased by Count de Prorok, extends between two streets that are not parallel, and measures approximately sixty-three meters in its greatest length, or fifty-three meters between the two gates. The gate at the northwest end (shown on Plate VI) is closed; the gate at the east end gives access to the excavation.

A. Part of the precinct excavated to the stele surface, that is, to the surface of the earth in which the dedicatory stones are set (Fig. 9). This is in the Second or Intermediate Level of the Punic Stratum (p. 34).

B. Small excavation below the stele surface to the bed rock, which is of limestone (Fig. 2).

C. Foundation of a temple constructed in the Roman period. This is assumed to have been a temple of Saturn (p. 33).

D. Portions of a rough cement floor.

E. Trial excavation in the unexcavated part of the area, which disclosed late walls but no traces of dedicatory stones or urns. This spot is outside the limit of consecrated ground.

F. Trial trench, fixing the limit of the consecrated area on this side; no trace of urns or dedicatory stones in place was found at the lower end.

G. Old trial pit, partly filled up.

H. Trial pit of 1925 which penetrated the roof of a vault. Apparently this vault is parallel to the other and formed part of the foundation of the same building. In this pit under the vault dedicatory stones were found at the same level as elsewhere, indicating that the limit of the consecrated area has not been reached on this side.

a. Modern doorway, broken into the side of the Roman vault for convenience of access.

b. Grave, perhaps of the Vandal period, about two meters below the surface of the ground.

c. Grave, perhaps of the Vandal period, about a meter and a half below the surface of the ground (Fig. 8).

V. THE EXCAVATION IN THE PRECINCT OF TANIT

The area, or precinct, of Tanit lies near the shore, a short distance west of the so-called Commercial Harbor (Fig. 10).

In December, 1921, limestone stelae with symbols associated with the cult of Tanit began to be brought to Tunis, and one of them came into the hands of a public official, M. Gielly, who was interested in antiquities. It was reported that they were dug up at La Marsa, north of Carthage, but the Arab who brought them was followed, and the place of discovery became known. This official and M. Icard, the chief of police in Tunis, purchased the property where the stelae were found, and in 1922 a trial excavation was made with funds provided by the Service des Antiquités.[1] In 1923 Count de Prorok assisted in the work; he finally purchased the property and invited the Abbé Chabot to come from Paris and join him for further exploration, in the spring of 1924. Besides Punic remains the trial excavation had brought to light the foundations of a Roman temple, probably of Saturn[2] (Fig. 13, C). The earlier excavation was more completely cleared in 1924, and in that year fresh ground of about thirty-two square meters in extent was excavated to a depth of five meters. The results were so striking that further excavation in the area

[1] François Icard, *Découverte de l'area du sanctuaire de Tanit à Carthage*, in the *Revue Tunisienne*, 1922, pp. 195–205; C. Saumagne, *Notes sur les Découvertes de Salammbo*, *Revue Tunisienne*, 1922, p. 231 ff.; R. Anthony, *Ibid.*, 1923, pp. 174–175.

[2] For the identification of Saturn with Baal-Hammon, cf. Audollent, *Carthage Romaine*, p. 395 ff.; also, S. Gsell, *Op. cit.*, IV², p. 287 ff., and the literature there cited.

was decided on as a prime objective of the work of the Franco-American staff in 1925.

The plot of ground originally purchased for this excavation by Count de Prorok is irregular in shape. It lies between two streets which are not parallel, and the greatest length is about sixty-three meters, while the width varies from fifteen to twenty-eight meters (Fig. 13). The extension shown on the plan (below, at the right) is an addition to the original purchase, which contains a well-built small house. This was secured by the Franco-American staff early in 1925 to provide storage for the season's finds, and to furnish a home for the guard; for it is necessary to police the area in order to prevent the theft of stelae and other stones left in place.

The present depth of the stelae surface, that is, the surface of the earth in which the stelae were set, varies, but here averages about four meters; this is a part of the second level of the Punic stratum (p. 45). Below that our excavation at one place at the rear, marked B on the Plan, went down about a meter, after the water was pumped out, to the bed rock, which here is of limestone (Fig. 2).

Along the north side of the area in the Roman period a great vault was constructed, which has a width of about three meters on the inside (Fig. 13). It is apparently the first of a series of parallel vaults which extend under the adjoining property on the north side and were designed to form a foundation for an extensive building. This vault was closed by masonry at the northwest end, and similar masonry extends to the left along the northwest end of the excavated area, under the modern wall with the gate shown in Plate VI; this wall is on the boundary line between the excavation in the precinct of Tanit and the street on that side.

Some of the earth which filled the vault had been taken out before 1925, at the northeast end, where the vault runs

under the adjoining property. It was found that, when the vault was constructed, between the walls dedicatory stones already covered with earth remained in place, at a level corresponding with the stele surface outside. In 1925 the stele surface in the vault at the northeast end was explored downwards into the water level, and underneath the

FIG. 14. — DEDICATORY STONES IN PLACE, UNDER THE ROMAN VAULT.

View as one stands near the middle of the vault, and looks toward the northwest end. The terrace of earth is at the right.

Of shrine-stones the one at the left in the foreground resembles that shown in Fig. 19. In two others the portal (p. 40) is plainly represented. Stelae of both types are easily distinguished (p. 36).

places where stelae had stood cinerary urns were found, showing that the area excavated outside had extended still further in that direction.

In the other part of the vault, in 1925 the earth was excavated to the stele surface, except for a narrow terrace along the north side to show the quality and condition of the earth removed. A hole which had been broken into the south edge of the roof of the vault was now covered with a window, and as the dedicatory stones were left in place,

a permanent exhibit was thus installed; for the walls and roof of the vault protect the dedicatory stones against rain (Fig. 14).

In the part of the vault examined I did not notice any impressions of boards on the under surface of the concrete, though this had not yet all been cleaned; and no tiles were visible. The section drawings reveal striking irregularities (Fig. 15). It is probable that the vault was made by first laying off the lines of the two trenches dug for the foundations, and by then heaping up the earth from the trenches between them and rounding the bank to the curve desired; that afterward the earth was then tamped down, and that the concrete walls and vault roof were inexpensively and quickly formed on it without the use of the supporting temporary construction which is required when vaults are to be left open for use. Further study both of this and of the adjoining vault is needed before conclusions can be safely formed regarding either the construction or the age.

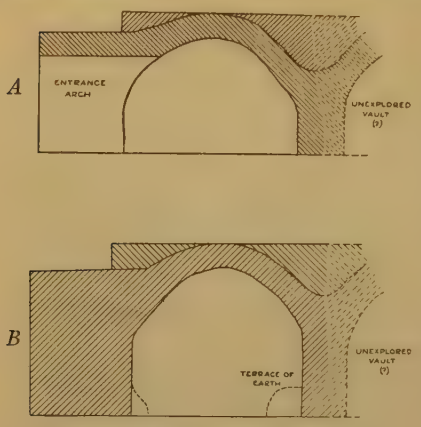

FIG. 15. — SECTIONS OF THE ROMAN VAULT.

A. Section of vault at entrance (Fig. 13, *a*).
B. Section of vault six meters southwest of entrance.

The finds are of two kinds, dedicatory stones and cinerary urns. The dedicatory stones are set in the earth like the tombstones of a modern cemetery, but are very close together and of moderate height (Fig. 6, 9). They are characteristic of the second Punic level, and are of three types.

First, there are the stelae, of hard limestone generally cut in narrow slabs, with tops narrowed to an edge like a

gable. A number of these bore incised dedicatory inscriptions, with symbols of Tanit. A typical inscription is that shown in our illustration (Fig. 16), which is translated thus :[1]

"To our Lady, to Tanit Face of Baal, and to the Lord, to Baal-Hammon; that which was vowed by Eshmunhalas, son of Yitten-Melekh, son of Baal-Amas, son of Melekh-Yitten, son of Hami, son of Baal-Hanna, [because] they heard his voice [and] they blessed him."

The names, like many names of the Old Testament, are significant. Eshmunhalas means "Eshmun" (that is, the god Eshmun) "hath delivered"; Yitten-Melekh, "Moloch giveth";

[1] Translation by Professor William H. Worrell. For the verb-forms see Paul Schröder, *Die Phönizische Sprache* (Halle, 1869), pp. 97, 193. The dedicatory inscriptions to Tanit and Baal-Hammon are collected in the *Corpus Inscriptionum Semiticarum*, Pars Prima, vol. I, no. 180 ff., and vol. II. Cf. also J.-B. Chabot, *Trois Inscriptions Carthaginoises à imprécations*, in *Le Muséon*, vol. XXXVII (1924), pp. 153–161.

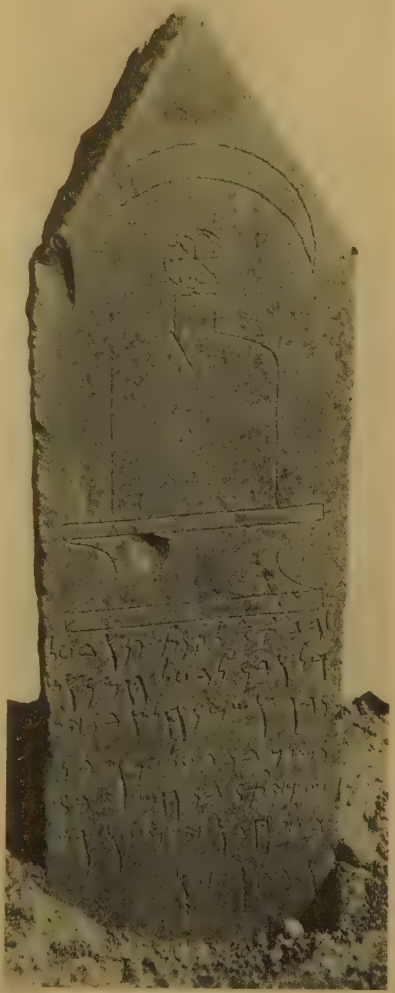

FIG. 16. — STELE WITH PUNIC INSCRIPTION AND SYMBOLS OF TANIT.

Above the inscription is a support, on which apparently a kind of bottle or flask is represented.

At the top is the crescent; the disk is ornamented with a rosette.

and Baal-Amas, "Baal carrieth." Of greatest interest to the historical student is the name Baal-Hanna, "Baal is favorable," which contains the same elements as the name Hannibal, in inverse order.[1] The care with which lineage is traced, in some cases extending back even eight or nine generations, indicates that the stelae were set up by representatives of the aristocratic families of Carthage.

FIG. 17. — STELE IN THE FORM OF A SQUARE PILLAR.

In this, as generally in the joint dedications found at Carthage, it is noteworthy that the name of the female divinity comes before that of Baal; but what the characterization "Face of Baal" signifies is far from certain. If Tanit was conceived as goddess of the Moon and Baal-Hammon god of the Sun, the explanation is obvious; but that is by no means established.[2] Other similar stelae, now without letter-

[1] The name Hannibal in the form transliterated as Hannibaal is found in Carthaginian inscriptions, as, *e.g.*, *C. I. S.*, I., no. 171.

[2] The literature is summarized by S. Gsell, *Op. cit.*, vol. IV², p. 244 ff., with footnotes. An entirely different conception lies at the basis of the explanation presented by C. H. Toy, *Introduction to the History of Religions*, edition of 1924, p. 170 ff.; for an earlier statement cf. W. Robertson Smith, *Lectures on the Religion of the Semites*, First Series, new edition (1894), p. 478.

ing, undoubtedly once bore inscriptions painted on the surface of the stones, or on stucco. One point is certain; the dominant divinity of Carthage was a goddess.[1]

With these stelae are classed also small rectangular pillars, some of which are carefully set in bases. These were probably covered with stucco, and inscribed (Fig. 17).

The second type is represented by few examples, but is not inferior in human interest. These stones are boulders, or large pebbles, oblong, with rounded corners and edges (Fig. 18). Among the visitors who came to our excavations was a French priest, Joseph Guyot, of the neighboring village of Le Kram. He was once a missionary on the Island of Mauritius, and he called these boulders "sacred stones," *pierres sacrées*. He gave an explanation which, at my request, he afterward wrote out in a letter. From this letter I translate:

FIG. 18. — BOULDER USED AS DEDICATORY STONE.

"In 1889 on the Island of Mauritius, in the district of Moka, sorcerers cut the throat of a little girl on a large pebble. A few years afterward, in the district of Flay, a woman was sacrificed in the same manner. It may be that on the island there still exist, in the open country, altars (generally placed under trees), on which are found the same stones of sacrifice, ordinarily large pebbles. And stones of

[1] The dominance of Tanit is doubted, without sufficient reason, by G. A. Cooke; see his *Text-book of North Semitic Inscriptions* (Oxford, 1903), p. 132. For the rare dedications to Tanit alone see J.-B. Chabot, *Comptes rendus de l'Acad. des Inscript. et Belles-Lettres*, 1922, pp. 112–114.

this shape were no doubt selected for such use because they raised the neck of the victim and furnished the support necessary to facilitate the cutting of the throat. I have myself seen more than twenty altars of this kind, each with its rounded stone, some larger, some smaller. The natives ordinarily sacrifice sheep or lambs on them."

Are the small boulders which infrequently take the place of carved stelae in the precinct of Tanit a survival of primitive religious conservatism, or are they the result of accident? Father Guyot advised that we carefully examine the surface to see whether there were scratches or other marks attesting the effect of a sharp implement, or ingrained stains of blood such as characterize the sacrificial stones on the altars in Mauritius; but no one yet has had the time to make such a study.

The third type of stones is far the most numerous, and is represented by more than three hundred examples (Fig. 9). For lack of a better term we may call them shrine-stones, because the shape in general suggests that of a shrine or altar, though there is no evidence that sacrifices of any kind were offered on them.[1] They are of coarse limestone and in many cases, at least, were originally covered with hard white stucco. It is not difficult to recognize in the carvings the suggestion of a shrine, often with steps leading upward (Fig. 19; cf. also Fig. 14). Sometimes receding moldings on the front seem to draw the gaze into a deep portal, through which we see a symbol of the goddess, or even a figure in human form; but whether this figure represents the divinity or a worshipper, in most cases it is not possible to say.

The symbols of Tanit carved on the dedicatory stones

[1] A report on the shrine-stones, stelae and urns first discovered was published by L. Poinssot and R. Lantier, with drawings to illustrate typical forms, in the *Revue de l'Histoire des Religions*, 1923, pp. 32–68.

are too numerous and too diverse to be described except in the final publication. Often they simulate a broad bottle, or flask[1] (Fig. 16), or a vase is represented (Fig. 24). Sometimes there is a lozenge-shaped figure, perhaps representing a stone that had become an object of worship (Fig. 20), or a rude pillar.[2]

FIG. 19. — SHRINE-SHAPED DEDICATORY STONE.

In the precinct of Tanit there is a considerable number of stones of this type, but no two are precisely alike.

The reason for the shape is not obvious. Does it perhaps symbolize a mountain with worship of some object on one of the "high places," such as are mentioned in the Old Testament?

[1] A remote but striking parallel is the water-bottle carved on Batak grave-posts. "The apex," says Professor Bartlett, "if the grave be that of a man, represents a common gourd or earthen water-jar with constricted neck." H. H. Bartlett, *The Symbolic Grave-Post (Anisan) of the Batak of Asahan*, in *Papers of the Michigan Academy of Science, Arts and Letters*, vol. I (1923), p. 4, and plates i ff.

[2] Cf. James Hastings, *Encyclopaedia of Religion and Ethics*, Vol. 2, pp. 287–288; references on the cult of Baal in Phoenicia and the Phoenician colonies are given on page 298. Cf. also, for the literature,

Sometimes the sacred objects are on a support or table (Fig. 24). The crescent, which is generally interpreted as a symbol of a moon-goddess, is often accompanied by a smaller disk (Fig. 12). Often the symbol of Tanit is a triangle with a line over the apex, or an adaptation of the human figure (Figures 12, 24); and these and other symbols are found in combinations.

FIG. 20. — SHRINE-STONE WITH SYMBOLS OF TANIT. Through a portal a lozenge-shaped figure is seen poised on a support underneath.

Groups of dedicatory stones as they stood when unearthed appear in our illustrations (Figures 6, 9). Some are seen under the great Roman vault; for, as already explained, the builders of the vault left undisturbed the earth which covered them, and now the removal of the earth makes a kind of Punic museum, which is protected from the elements by the roof of the vault. The

the articles *Baitylia*, Pauly-Wissowa, *Real-Encyclopädie*, Vol. II, and *Baetylia*, Daremberg-Saglio, *Dictionnaire des Antiquités*, Vol. I.

vista as one looks through the vault toward the light at the northwest end over the densely crowded dedicatory stones gives the impression of something weird (Fig. 14); it seems full of mystery, — as in truth it is.

The cinerary urns were deposited at different levels. How many successive levels were filled in with earth is not yet certain, but in the part excavated in 1925 there were three levels. The lowest urns were found in the shallow depressions of the bed rock, or just above the rock, where water now stands except when pumped out. Nevertheless, with skill in handling, a number of these urns were taken out with the surface and contents intact (Fig. 3). The height is eighteen to thirty centimeters, and about each urn a small cairn of rough stones was carefully piled (Fig. 21), the stones varying in bulk from the size of an egg to that of a double fist, or even somewhat larger. In the area which was excavated to bed rock, about 40 square meters in extent, 31 of these urns were found; they stood about a meter apart.

FIG. 21. — CAIRN OF STONES ABOUT A CINERARY URN.

Underneath is the bed rock, in the lowest Punic level.

In the light of evidence collected by Mr. Harden the urns of the lowest level may be dated, provisionally, in the ninth or eighth century B.C. If this dating is confirmed by future studies, we may find ourselves on a spot set aside as holy ground at the very founding of Carthage. In a paper read at the meeting of the British Association at Southampton in August, 1925

(not yet published), Mr. Harden describes these urns as follows:

"They are of various shapes, but the predominant type is the amphora with ovoid body and outsplayed neck. The clay is of a deep red color. The amphorae, and also the urns without handles, are usually painted with red over part, if not all, of their surface. The amphorae in addition often have triglyph and metope designs on their shoulders, painted in black on a ground of red." Speaking of an amphora in situ, he adds: "The marvel is that with so many loose stones hemming it in all around, and standing up to its neck in water, this urn, and many like it, were able to be extracted whole from their resting-place (Fig. 22). The water had of course done considerable harm to the red paint, but the clay itself was undamaged."

FIG. 22. — CINERARY URN AS FOUND.

This graceful urn represents the type found in the lowest Punic level, resting on the bed rock.

It was surrounded by a small cairn of stones, part of which have been removed in order to photograph the urn in position. The cover of the urn is still in place.

It is to be presumed that originally the urns were not deposited in mud, or in water. When this began to collect around them, and how long they have been under the level of the ground-water seeping through just above sea-level — whether, again, water has stood around them throughout the long dry summers — are questions upon which no light has yet been thrown. Nor has it yet been possible to

determine, by chemical analysis, whether the black earth around them is ordinary humus. This layer averages about half a meter in thickness.

. Above the black earth of the first level is a layer of yellow clay, about seven centimeters thick. In the clay there were several spots which contained traces of charcoal. This could have had no relation with the layer of charcoal already referred to (p. 17), at a higher level; on the other hand, there was nothing to suggest an ustrinum.

Immediately above the layer of yellow clay the second level commences. This averages in depth from one and a half to two meters. The earth is of a less compact texture, and is of a greyish or brownish tone. In the second level no cairns were found; instead, the urns were placed close together in the ground, generally in groups of three or four, and over each group a dedicatory stone was set up. The dedicatory stones must have remained for a considerable period exposed to view, and at one time the undisturbed sections of the precinct presented much the same appearance as today, except that many stones now show rough surfaces which once were covered with stucco, or painted, and bore inscriptions. Relatively there were more than four times as many urns in this level as underneath, and about twice as many as in the upper or third level.

When the third level was laid down it is not possible to determine with any degree of accuracy. It may suffice to say that probably at the end of the fourth century B.C., or somewhat later, the part of the stele area excavated in 1925 was filled with earth, about a meter in depth, so as to cover the tops of the shrine-stones and stelae; and then urns were buried in the earth among the tops of the dedicatory stones.

The evidence lies in the character of the sherds. In the first and second levels the few sherds found are of early

date; in the third level Mr. Harden, who was studying the strata during excavation from this point of view, reported the finding of fragments of black Campanian ware, of Hellenistic lamps, and of the latest types of Punic ware. This level, then, was used for the deposit of cinerary urns in the period immediately preceding 146 B.C. He found no sherds suggesting an origin earlier than 300 B.C.

FIG. 23. — CINERARY URN, INTERMEDIATE PUNIC LEVEL OF THE PRECINCT OF TANIT.

The urn is of a buff color. It has a simple decoration of six incised lines about the body at the level of the handles.

The contents have not been analyzed. Such urns previously examined in most cases were found to contain the charred bones of young children; in other cases, similar remains of kids and lambs.

The urns of the upper and middle level are of many different types, but in most cases they are two-handled (Fig. 23). Generally they are undecorated, and clay of a light buff color was ordinarily used. The urns of the upper level are smaller than those of the middle or lower level, and of slight artistic value.

It seems, at first thought, strange that the priests of Tanit and Baal-Hammon should have covered with earth the noble array of monuments which evidenced the devotion of earlier worshippers. There may have been religious reasons;

but it is also possible that the decadence evidenced thus, and in the urns themselves, reflected the impoverishment and distress of the Punic wars.

The total number of urns taken out in 1925 and now stored in the small house purchased for the purpose is about eleven hundred. It will probably be two years before a final report on the contents can be made, and before more definite conclusions can be formulated regarding the periods and dates. The laboratory examination of the contents is a process alike difficult and time-consuming. If we take into account the results of the examination of thirty-six of the urns unearthed in 1925 that have already been superficially studied, together with the reports upon the contents of the urns previously taken from the precinct of Tanit, we may believe that the majority will be found to contain the charred bones of young children, in many instances — particularly in the case of urns of the lowest level — accompanied by objects associated with childhood, such as small rings, bracelets, earrings, beads and amulets. Of metals, gold, silver, bronze and iron are represented. Many urns contain a minute bit of gold leaf. The Egyptian influence manifest in many of these objects will be of value in working out the chronological sequence. Charred bones of lambs and kids are also found; and with other remains now and then the bones of one or two small birds.

After the charred bones and small objects had been deposited in the urn, in many cases, at any rate, earth was filled in above. The mouth of the urn was closed with a stopper of clay. Over the stopper a lid was placed. This was sometimes a flat disk of baked clay, made for the purpose (Fig. 23). In other cases pieces of pottery of various kinds were used in place of a lid, such as small saucers, and bowls and ointment jars.

Does this deposit of charred bones of young children

under dedicatory stones along with those of kids and lambs and little birds imply that these were all victims, offered by burning alive to Tanit, or to Tanit and Baal-Hammon? There is, to be sure, no lack of literary evidence that the Carthaginians "passed" children "through the fire" to their gods, and that the practice persisted in North Africa even after the Roman conquest.[1] One writer, M. P. Pallary,[2] finds in the precinct of Tanit not only full confirmation of this horrible practice among the Carthaginians, but also evidence which sheds new light upon references to the consecration of first-born males among other Semitic peoples, such, for example, as the familiar references in *Exodus*, chapter xiii, and *Numbers*, chapters viii and xviii; and he explains the presence of the remains of small birds by the words in the Gospel of *Luke*, chapter ii, verses 23 and 24. Furthermore he interprets as a survival from an early Semitic ritual of sacrifice a custom still in vogue among the Jews in North Africa. When the first male child is born in a Jewish home, he says, a member of the Cohen family,

[1] S. Gsell, *Op. cit.*, IV², p. 405 ff. and literature there cited.

[2] *Revue Tunisienne*, 1922, pp. 206–211. See also II *Kings*, iii. 26–27, for the sacrifice of a first-born son as a burnt-offering. The sacrifice of Isaac, of which the consummation was prevented by divine interposition, finds a parallel in the sacrifice of Iphigenia. For the persistence of human sacrifices among civilized peoples north of the Mediterranean cf., *e.g.*, J. S. Reid, *Human Sacrifices at Rome*, in the *Journal of Roman Studies*, vol. II (1912), p. 34 ff.

It does not fall within the scope of this report to make further reference to the extensive literature of human sacrifices, whether of infants or of adults, among primitive peoples generally, or among the more advanced Semitic stocks. Sporadic instances are still reported; for example, in November, 1925, American newspapers published the following despatch, sent out by the Associated Press:

"Pueblo, Colorado, Nov. 8. The love of a Ute Indian for his bride, which caused him to bury his 17-day old baby alive in the grave of its mother, believing it would bring her back to life, will bring Platt Nae face to face with the white man's law here to-morrow in a federal court trial for murder.

"Nae, who has been held in jail here since last February, will invoke the law of the medicine man for his defense. He contends that he buried the child on the advice of his father-in-law, Mormon Joe, medicine man of the Utes, who is also held as an accessory."

PLATE VI. CARTHAGE: EXCAVATION IN PROGRESS IN THE PRECINCT OF TANIT, APRIL 2, 1925

The tops of dedicatory stones have been cleared, and the earth is being very carefully removed from about the lower parts.

which formerly conducted the sacrifices, presents himself at the home of the parent and demands the babe as belonging to him. The mother acknowledges the absolute right of the Cohen, and offers to ransom the child; the ransom is arranged by means of gifts.[1]

But the time is not ripe for generalization upon the significance of these discoveries. Not only the laboratory examination of the urns but further excavations are required. It is not impossible that rigid investigation of the condition of the bones that are only partially burned may settle the question whether the bodies of young children were committed to the flames before or after death. Meanwhile, it should be noted that there is no trace whatever of cremation in the part of the precinct thus far excavated.

The limits of the precinct of Tanit are known at only two points, on the northeast and south sides (Fig. 13), and the extent is yet undetermined. There is the possibility that future excavation may disclose a much larger area than is now known and increase the number of urns by many thousands. In our explanation we should resort to the hypothesis of sacrifice of living infants only in case the facts of discovery warrant it; the burden of proof in this instance rests on the affirmative.

[1] In response to a request for information in regard to a similar custom among Jews outside of North Africa Professor Harry Caplan of Cornell University kindly sends me the following note:

"You will find the Redemption of the First-born Son discussed and interpreted in the *Jewish Encyclopedia*, vol. X, article 'Primogeniture.' The origin of the institution is connected with the slaying of the first-born of Egypt.

"To that account I should add that it is still the custom of Orthodox Jews, even in America, to perform the ceremony of Redemption (the Pidyon Ha-Ben), with festivities and appropriate prayers. On the thirty-first day after birth, in token of dedication to Jehovah, the child is presented to the priest (Cohen), and is then returned to his father in exchange for five pieces of silver. The Cohen usually donates the money to charity. Silver coins of various amounts are used as equivalents of the five shekels prescribed in the Bible. I remember that in the case of a poor family a child was redeemed for a number of spoons, forks, and other articles of tableware, which were afterwards returned to his parents."

But who was this potent goddess Tanit, that in the joint dedications has precedence over the god Baal-Hammon? In this matter, Semitic scholars inform us, no help is derived from the study of possible Phoenician prototypes. Tanit is distinctively Carthaginian, and may represent a primitive Libyan divinity, whose cult, blended with Phoenician elements, was taken over by the Phoenician colony.[1] And we should heed the suggestion of Franz Cumont, who reminds us that the gods of Semitic peoples are less definitely characterized and less clearly visualized than the divinities of Greek cults.[2]

FIG. 24. — STELE WITH SYMBOLS OF TANIT.

Above, the crescent with the disk; then, a symbol of a human figure.

Below is a table, on which a vase is standing.

[1] A summary of a current theory of the Libyan origin of the worship of Tanit is given by C. F. and L. Grant, *African Shores of the Mediterranean* (1912), p. 26 ff.

Throughout Egyptian history, my colleague Professor Worrell informs me, the great goddess of the Libyans bore the name which in its unvocalized form is transliterated N T; this is commonly vocalized and written as Neit. "With the common Hamitic feminine prefix T this would be the exact equivalent of the name of the great goddess of Carthage, which in its unvocalized form is written in the Punic language with consonants corresponding to T N T. The vowels of the name were short, but whether they are correctly given in the form Tanit is by no means sure. The transliteration of the third consonant of T N T as *th* (in Tanith) is a Hebraism which, so far as known, has no place in Phoenician."

[2] Pauly-Wissowa, *Real-Encyclopädie*, vol. III., p. 1249: "Die semitischen Gottheiten haben nicht wie die griechischen eine scharf ausgeprägte Individualität. Ihr Character ist vielfältiger und unbestimmter. Je nachdem man die eine oder

We need not be surprised therefore to learn that Tanit has been identified with several different divinities of other peoples.

One identification, however, seems well established. By the Romans the dominant Carthaginian goddess was identified with Juno, first under the name Juno, as in the *Aeneid*, later under the name Caelestis [1] as queen of heaven. Shall we ever know what local reference Virgil had in mind when he referred to the chariot of Juno at Carthage, *hic currus fuit?* But to appreciate the onward movement of his poem it is necessary only to recall that the poet, in picturing Carthage as the home of the only true heroine of Augustan literature, conceived the affection of Juno for Dido's city as surpassing her regard for all other places:

> Urbs
> Quam Iuno fertur terris magis omnibus unam
> Posthabita coluisse Samo.

andere ihrer Eigenschaften hervorheben wollte, hat man sie verschiedenen abendländischen Göttern gleichgestellt, aber völlig entsprechen sie keinem."

[1] The references are given by A. Audollent, *Carthage Romaine*, p. 371 ff.; S. Gsell, *Op. cit.* IV [2], p. 258 ff.

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